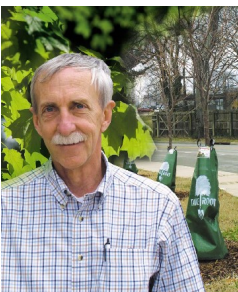


2019 State of the Trees Report

Department of Public Works Division of Urban Forestry

2019 — A Forester's Perspective

The year 2019 started with lots of rain, storms, and downed trees and appeared to be on target to set a record for precipitation. Then in the late summer and early fall the skies cleared and we had record heat that lasted well into the fall with 100 degree days in October. This just goes to prove how challenging it can be to manage a natural resource, any natural resource when the weather can be so highly variable. For several years now I have written a weekly "Fall



Gene Hyde is editor of this publication.

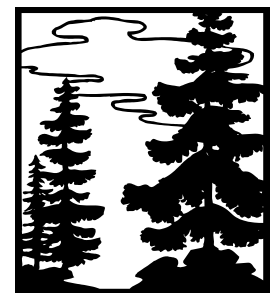
Color Report" beginning in October but there wasn't much color to write about this year. In the past three years I have reviewed and approved a total of 184 Tree Ordinance permits for construction projects involving either the protection of and/or the planting of new

trees in the City streets rights-of-way.

Recently I filled out the paperwork for retirement and my last day on the job will be January 31, 2020. I started as the first City Forester; my first day on the job was June 1, 1990. My intent was to come in as an "impact player" and to make a difference. I'll let history judge as to whether or not that happened. But regardless, I must give credit for any success I may have achieved along the way to other people. Specifically the Tree Commission, and professional organizations such as the Tennessee Urban Forestry Council, The Society of Municipal Arborists, and the International Society of Arboriculture have educated and enlightened me. I also must give a huge amount of credit to my superiors for their support. And I can't forget about my employees who endure the blazing heat of summer and freezing cold of winter to get the job done. These people all have been a blessing and I'll miss them terribly. Replacing me is a fine young man, Pete Stewart.

Inside this report:

<i>Tree Planting</i>	2
<i>Unfinished Business and On-going Projects</i>	2
<i>Status of Service Requests</i>	2
<i>Lecanium Scale and the Beneficial Insect Initiative</i>	3
<i>The Tennessee Interstate Conservancy</i>	3
<i>Staff Happenings</i>	4



Arbor Day on Main Street

On a cool overcast day in March of 2019 forty-four Redbud and Winter King Hawthorne trees were planted by volunteers on East Main Street in the verge areas between the sidewalk and the street. A single hawthorne was planted in honor of local resident Mr. John Henry, who is a world renown sculptor and has displayed his craftsmanship in many countries. His efforts are well known locally as he has worked to make Chattanooga a much cleaner and more aesthetically attractive destination for both residents and visitors. He also had a major hand in developing the Sculpture Fields Park. Mayor Andy Berke joined the celebration which also saw Chattanooga recertified by the Division of

Forestry as a Tree City Community. Chattanooga met the four standards for recertification:



Members of the Park Central Neighborhood Association plant a Hawthorne.

1. Have a Tree Board or Department.
2. Have a Tree Care Ordinance.
3. Have a Community Forestry Program With an Annual Budget of at Least \$2 Per Capita.
4. Have an Arbor Day Observance and Proclamation.

Special Points of interest in 2019:

- Chattanooga was a 'Tree City' for the 29th year.
- Arbor Day was held streetside on East Main Street.
- There is no backlog of Service Requests awaiting inspection.

Tree Planting in 2018

A total of 163 trees representing 23 species and varieties were purchased and planted by in-house and contract crews in 2019 as street and park trees. They are:

1. American Fringetree	1 ea.
2. 'Armstrong' Red Maple	1 ea.
3. 'Autumn Blaze' Maple	2 ea.
4. Blackgum	1 ea.
5. 'Bosque' Elm	8 ea.
6. Chinese Pistache	3 ea.
7. Fastigiate English Oak	1 ea.
8. 'Golden Globe' Ginkgo (bare root)	10 ea.
9. Greenleaf Holly	1 ea.
10. 'Happidaze' Sweetgum	7 ea.
11. 'Littleleaf' Linden	1 ea.
12. Overcup Oak	18 ea.
13. 'Pyramidal' European Hornbeam	2 ea.
14. 'Princeton' America Elm	2 ea.

15. Redbud	19 ea.
16. 'Regal Prince' Oak	4 ea.
17. Trident Maple	6 ea.
18. Tulip Poplar	5 ea.
19. 'Village Green' Zelkova	8 ea.
20. Willow Oak	2 ea.
21. 'Winter King' Hawthorn	7 ea.
22. Yellowwood	3 ea.
23. Yoshino Cherry	53 ea.

SUMMARY

Cost of 163 trees: \$13,954. Cost of Shipping: \$1,400

Cost of Planting 163 trees: \$8,560

Total Cost of Planting: \$23,914.

Note: An additional 29 trees were paid for by the Park Central Neighborhood Association and planted by volunteers on Arbor Day.

Unfinished Business and Ongoing Projects

In December City Forester Gene Hyde remarked that there is unfinished business that he would like to see addressed in a meaningful way. There are five special topics outlined below:

1. Hiring, Training, and Retaining employees. Gene said that he has seen a decline in qualified candidates to fill vacant positions, all of which require a Commercial Drivers License (CDL). Currently CDL holders can go to work for private companies for much more money than what the city can pay. Therefore any new employees will need intensive training in safety practices and operational procedures.
2. Routine Maintenance. There are approximately 8,000 trees planted along the gateways into the city and in the Central Business District. All of these need regular routine pruning and maintenance. Unfortunately the large volume of service requests takes most of the available crews' attention leaving little time for routine maintenance.
3. Inventory Update. The last inventory of 6,700 trees along the gateway entrances and the CBD was done about ten years ago. The inventory can be displayed as a shape file on the City's GIS system and is available only to those authorized and licensed to view the data. Inventory updates are pricey and could cost as much as \$40,000.
4. The South Broad Street Gateway Initiative. The conceptual idea for this initiative is to blend and adjust the street tree population to line up with the changing face of that area as well as to address concerns of all stakeholders. Many of the 300 trees there have lived out their useful lives and need to be replaced.
5. The CBD Mulch Contract. There are approximately 2,600 tree wells in the CBD area. Many have insufficient levels of mulch which present a trip hazard if an inattentive person makes a mis-step. All 2,600 need to be inspected and new mulch added as needed. A new contract should be awarded in the spring of 2020 with work to begin soon after.

Status of Service Requests

Responding to service requests is the single most time consuming and expensive aspect of our urban forestry operations. These requests pour in from the general public as well as from various departments within the city. In 2019 the 311 Call center records indicate that we received 1,155 requests and that all of them have been inspected and closed. One measure of operational efficiency is how quickly we are able to inspect a request and either create a work order or deny service. Each category of request has a time deadline for inspection and the clock begins to tick as soon as the Service Request is received. Shown below are the number of requests

received by category in 2019, the allotted time for inspection, and the percentage of requests inspected and closed on-time. These stats do not include the time it takes to actually perform the on-site service. Those figures are not available.

General Tree Problems	174	5 days	81% on-time
Fallen Trees and Branches	380	5 days	78% on-time
Tree Removal/Hazard	193	35 days	91% on-time
Tree Trimming	408	25 days	88% on-time
Totals	1,155		

Lecanium Scale and The Beneficial Insect Initiative

Last year it was reported that 562 oak trees in the downtown CBD area were treated in June, 2018 with an insecticide to reduce the population of Lecanium Scale. This destructive insect begins the deterioration of host trees by sucking the vital sap and juices out of the tree. In the process they excrete a tiny droplet of honeydew which coats anything underneath the canopy with a sticky mess. Apparently the insecticide treatment was successful because no trace of the insect could be found in 2019. However the Tree Commission and other organizations voiced their concerns about the



Lecanium Scale poses a serious threat to the health of downtown oaks.

use of insecticides that could cause damage to native insects, particularly the pollinators. City Forester Gene Hyde voiced his preference for taking a holistic approach to dealing with this problem. He teamed up with Lyn Ruth-

erford and her staff in the Water Quality section of Public Works to research ways to create small pockets of native vegetation in the Central Business District.

These pockets (actually micro ecosystems) have native plants that support populations of beneficial insects that will predate against harmful insects such as aphids and the Lecanium Scale. So far this idea has attracted a lot of interest from many directions including private arborists, Public Works officials, and even a graduate student wanting to focus her Master's thesis on the project. Current project goals are to:

1. Keep the population of detrimental insects to levels that will not jeopardize the health of over 1,000 oaks in the CBD and surrounding area.
2. Keep public trees in good health so that they will provide maximum stormwater retention benefits.
3. Maintain a population of native pollinator insects to service the CBD.

There are many questions that remain unanswered. For example, how many vegetative plots are necessary, where to locate them, and how many insects need to be purchased at the beginning and each subsequent year. The mechanics and costs are not entirely clear but there is the possibility of a good payoff if the project is successful.



The Tennessee Interstate Conservancy

In 2015, the Tennessee Department of Transportation began the renovation of the Highway 27 corridor through downtown Chattanooga. The overall cost of the project is \$126 million dollars and was the most expensive project ever let by TDOT to date. Concern over the finished appearance of this major gateway into the downtown Central Business District drove Judge Neal Thomas to approach TDOT with the simple question, "What are you going to do to protect the scenic nature of our downtown corridor". Judge Thomas learned that the firm of Ragan Smith was responsible for designing the landscape enhancements that would grace the 22 acres upon the project's completion. An advisory team of local stakeholders was assembled to guide the consultant in the most appropriate selection of species for the site. Sensing the potential for this project to serve



Renovation of Highway 27

as a state-wide model, Judge Thomas founded the Tennessee Interstate Conservancy. According to their website, the primary goal of the Tennessee Interstate Conservancy is to 'Be a Friend' to our state

roadways by installing and maintaining aesthetic vegetation and reforestation, protecting scenic and natural resources, and designing landscapes that create a sense of place and pride. The Gateway to Chattanooga project alone will include the installation of over 1,000 trees, 1,300 day lilies, 1,200 blue iris and over 4 acres of wildflowers. Public Works consultants included representatives from both the Water Quality and Urban Forestry sections. A Recommendation were made to increase the use of native trees and small plants from the mint and carrot families that will serve as natural habitat for the Beneficial Insect/Pollinator Initiative. That project is described in the story above and will be launched in the spring of 2020. Maintenance for the area will be transferred to the City of Chattanooga upon completion and acceptance of the project. Funding is expected to be provided by the City of Chattanooga (25%) Hamilton County (25%) and the Tennessee Interstate Conservancy (50%). Judge Thomas has already made outreaches to other communities within Tennessee regarding the benefits of this conservancy. The response has been overwhelmingly positive and it appears that the Conservancy has the potential to guide similar interstate landscaping projects across the state of Tennessee.

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Chattanooga Tree Commission Members:

Grace Wooten, Chair
B.J. Absher
Bruce Blohm
Dr. Hill Craddock
Erica Lewis
Michael Strok, Vice-Chair
Craig Walker
Sally Wencel
Carol White

Administrator of Public Works:

Justin Holland

Deputy Administrator of Public Works:

Donald Stone

Director of City-Wide Services:

Rick Colston, Jr.

The Urban Forestry program functions as a separate operation within City Wide Services. Its mission is to provide the City with a safe and attractive urban forest, and to educate citizens about the benefits and proper care of trees. It is guided by the nine-member Tree Advisory Commission as appointed by the Mayor. The Forestry Division draws on other elements within both Public Works and Parks and Recreation to assist with tree planting, solving service requests, and other missions. The program's main operating budget for FY '18-'19 of \$945,542 is derived strictly from annual appropriations.

This report is prepared annually at the request of the Tree Advisory Commission.

Forestry and Emergency Staff

In 2008, the Urban Forestry operations were expanded to include the Emergency Department and in 2014 the Central Business District Crew was created.

Listed below are the current employees in their assigned sections:

Urban Forestry:

Tree Trimmers: Rich Jekel, Pete Stewart, Jason Gates

Equipment Operator 4: Bruce Johnson, Dexter Joshen,

Crew Supervisor 2: Mike Richie, Wayne Pinkerton, and Tommy Harris

Forestry Supervisor: Milton Stewart

Emergency:

The Emergency Department has the responsibility for the removal of chemical spills along roadways as well as dead animal pick-ups, litter pick-up, and discarded tires. They also are on-call at night for fallen trees, pothole repair, and other mishaps that present a hazard to travelers along City streets. There is always an around-the-clock Emergency Department worker on duty every day of the year!

Workers include:

Equipment Operator 1: Alvin Thomas and Warren Tillison
Equipment Operator 3: Unfilled
Equipment Operator 4: Sherman Sales, David Lanford, Michael Blassingame, Steve Harrelson, Clarence Shepherd, Greg Greeson, and Chris Wells

The Central Business District:

These crew workers are responsible for the cleanup of leaves, litter and making the downtown area clean and attractive.

Workers include:

Crew Worker 1: Kendrick Heathington, Robert Ware, Rodney Jackson, and Mario Taylor.
Equipment Operator 3: Van Johnson
Crew Worker 2: Bradley Bardin
Crew Supervisor 2: Terry McCullough

